

Some species of Microlepidoptera new to the Belgian fauna (Lepidoptera : Tortricidae & Epermeniidae)

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Abstract. This paper introduces the following species to the Belgian fauna : *Olethreutes turfosa* (Herrich-Schäffer, 1851), *Bactra suedana* Bengtsson, 1990, *Bactra lacteana* Caradja, 1916 (Tortricidae) and *Epermenia petrusella* (Heylaerts, 1883) (Epermeniidae). At the same time *Bactra suedana* Bengtsson, 1990 is introduced new to the Lithuanian fauna. The species *Bactra furfurana* (Haworth, 1911) (Tortricidae) is deleted from the Belgian list (De Prins 1983: 19) being a misidentification of *Bactra lacteana* Caradja.

Samenvatting. Enkele soorten Microlepidoptera nieuw voor de Belgische fauna (Lepidoptera : Tortricidae & Epermeniidae)

De auteur vermeldt volgende soorten nieuw voor de Belgische fauna : *Olethreutes turfosa* (Herrich-Schäffer, 1851), *Bactra suedana* Bengtsson, 1990, *Bactra lacteana* Caradja, 1916 (Tortricidae) en *Epermenia petrusella* (Heylaerts, 1883) (Epermeniidae). *Bactra suedana* Bengtsson, 1990 is ook nieuw voor de fauna van Lithouwen. *Bactra furfurana* (Haworth, 1811) (Tortricidae) dient van de Belgische lijst (De Prins 1983: 19) verwijderd te worden. Alle als dusdanig vermelde en door de auteur onderzochte exemplaren bleken tot *Bactra lacteana* Caradja te behoren.

Résumé. Quelques nouvelles espèces de Microlépidoptères pour la fauna belge (Lepidoptera : Tortricidae & Epermeniidae)

Les espèces suivantes sont mentionnées pour la première fois de Belgique : *Olethreutes turfosa* (Herrich-Schäffer, 1851), *Bactra suedana* Bengtsson, 1990, *Bactra lacteana* Caradja, 1916 (Tortricidae) et *Epermenia petrusella* (Heylaerts, 1883) (Epermeniidae). *Bactra suedana* Caradja, 1990 est nouveau pour la faune de Lituanie. *Bactra furfurana* (Haworth, 1811) (Tortricidae) doit être supprimé de la liste belge (De Prins 1983: 19) car tous les exemplaires mentionnés dans la littérature et examinés par l'auteur se révèlent être *Bactra lacteana* Caradja.

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Olethreutes turfosa (Herrich-Schäffer, 1851)

Material examined: [Belgium, Hautes Fagnes]: Baraque Fraiture, 2 specimens 29.VI.1955, coll. R.M.H.N.B., E. Janmouille det. 1957, ver. K. Larsen 1992.

The two specimens have been determined correctly but were apparently overlooked in all these years. It is not a difficult species to identify (fig. 1). Wingspan 13-16 mm, greyish brown with many silvershining fine lines across the wing and a white spot in the middle. The male genitalia are figured by Hannemann (1961: 214) and by Kuznetsov (1989: 626), the female genitalia by Palm (1972: 87) and Razowski (1983: 159).

In Scandinavia, Siberia and in the Alps *turfosa* flies in open heathland and woodland, but in Denmark and Germany the locality consists of raised bogs or moors with plants of Ericaceae and Vacciniaceae. In the Danish locality on Zealand, where the species is very common, intensive search for the larva has failed until present. The foodplant is supposed to be moss, but this has to be confirmed.



Fig. 1: *Olethreutes turfosa* (Herrich-Schäffer, 1851), Belgium, Hautes Fagnes, Baraque Fraiture, 29.VI.1955 (coll. R.M.H.N.B.).

The flight period extends from the end of May to the end of June and again in single specimens in August. The species is flying swiftly very low over the lowest parts of the vegetation in late afternoon's sunshine. Later it comes to light.

The distribution pattern is Eurasiatic, in Europe boreo-montane. The species is found from the Far East: Chukchi to Amur and Sikhotealin across Siberia to Finland, Sweden and Norway. In Denmark it is found in one raised bog in northeast Zealand, and besides two migrating specimens at Bornholm in the Baltic sea have been mentioned. In Central Europe it is found in Slovakia, Poland and north Germany (Oder at Berlin). Further south it is found in the mountains of Austria, Switzerland and France north to Doubs. The locality in Belgium is the westernmost locality at all (Hannemann 1961: 411, Kennel 1921: 396, Kuznetsov 1989: 623, Lhomme 1946: 411, Patocka, Reiprich & Pastorális 1989: 31 and Razowski 1983: 79).

In Kennel (1921) and in Staudinger & Rebel (1901) *turfosa* is mentioned from Labrador. This is a misidentification of the Nearctic species *Olethreutes intermistana* (Clemens, 1865), which is very closely related to *turfosa* (see Heinrich 1926: 184).

***Bactra suedana* Bengtsson, 1990**

Material examined: Belgium, Brussels, Anderlecht, 1 specimen, 18.VI. [19]38, leg. L. Legiest, det. *Bactra lancealana* Hb., coll. R.M.H.N.B. 15.728 and E. Janmouille det. 1951 as *Bactra lancealana* Hb. Gen. slide 5152 *Bactra suedana* male, 26.II.1993 K. Larsen.

Lithuania, Iviolo, 1 female 20.VI.1975 (leg. P. Ivinskis, coll. W. De Prins). Det. P. Ivinskis as *Bactra furfurana* (Hw.) female.

In Lithuania the species is known from Curonian Spit: Nida and Palanga, a total of 9 specimens, all in coll. P. Ivinskis (pers. comm. Ivinskis), besides the specimen in coll. W.O. De Prins. All specimens from Lithuania are females.

Bactra suedana is newly discovered by the Swedish entomologist B.Å. Bengtsson on the basis of many specimens from a small locality in Sweden, Öland: Böda, Torp.

In fact *suedana* is one of the most easy *Bactra* species to determine (fig. 2). Wingspan 15-19 mm. The ground colour of the forewing is pale ochreous with a dark longitudinal streak from base to apex. Near the apex *suedana* has two



Fig. 2: *Bactra suedana* Bengtsson, 1990, male. Belgium, Brussels, Anderlecht, 18.VI.1938, leg. L. Legiest, coll. R.M.H.N.B.

to three pronounced black streaks pointing to the apex. These black streaks are present even in worn specimens. The female has a more pure ground colour like females of other *Bactra* species, but the dorsal portion of the forewing is not or hardly darker than the costal half.

The biology of *suedana* is unknown. The species is found in wet meadows and marshes where *Carex* and *Juncus* species are abundant. The moth flies very late at dusk and is not as active as other members of the genus. Usually it occurs after other Microlepidoptera have stopped their activity, and later it comes to light. Flight period from 18 June till 24 August with the maximum in June and July.

The genitalia of all north European *Bactra* species are figured by Bengtsson (1990). When the species was described in 1990 it was only known from three localities in Sweden, Öland: Böda, Torp and Djurstad; Skåne: Skanör and three localities in Denmark, northeast Zealand (NEZ): Risby; south Zealand (SZ): Vester Egesborg and Lolland, Falster, Møn (LFM): Vålse Vesterskov. Since then it has been discovered in four more localities in Denmark, (NEZ): København Ø. and Vest Amager and (LFM): Ulvshave and Mellemskov (Buhl et al. 1991 & 1993), and in one more locality in Sweden in the south of Gotland (Svensson i.l. 7.II.1993). The locality Risby; where the species is common, is only situated 12 km from the centre of Copenhagen.

Thus far the oldest known specimen was caught in 1979, in spite of intensive search in many collections. The Belgian and Lithuanian specimens are therefore to be considered as the oldest known specimens. It has to be added that the museum collections of Luxemburg, Brussels, Antwerpen and Amsterdam, besides several private collections have been examined by the author, and the museum collection of Leiden, where a very extensive material of *Bactra* specimens is kept, has been examined by Ole Karsholt without finding any further specimens.

It is still an enigma where this species has its origins. The Belgian specimen points to the fact, that it could be overlooked, but the Danish findings point towards a migrating species in recent times. The distribution known by now is shown on the map (fig. 3). The pattern gives an impression of a central to eastern European species, but the overall distribution is probably much larger.

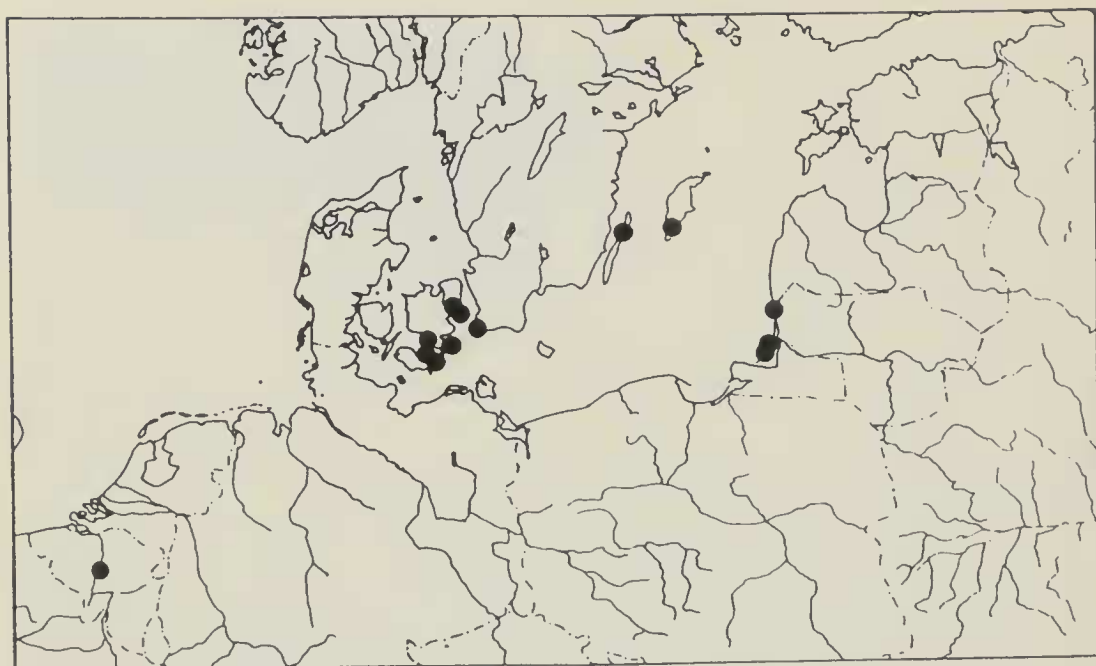


Fig. 3: Distribution map of *Bactra suedana* Bengtsson, 1990.

Bactra lacteana Caradja, 1916

Material examined: [Belgium, Prov. of Limburg]: Sutendael, 29.VII.1947 (leg. De Laever, coll. K. Larsen). E. Janmouille det. 1948 as *Bactra lancealana* Hb., female, Gen. slide 2814 *Bactra lancealana* Car. male, 26.II.1993 K. Larsen.

[Belgium, Prov. of Limburg]: Sutendael 20.VI.1950 (leg. E. De Laever, coll. R.M.H.N.B.). E. Janmouille det. 1950 as *Bactra lancealana* Hb. and in 1956 as *Bactra furfurana* Hw. male.

[Belgium, Prov. of Limburg]: Genk 21.VII.1954 (leg. E. De Laever, coll. R.M.H.N.B.), E. Janmouille det. 1959 as *Bactra furfurana* Hw. male.

[Belgium, Prov. of] Antw[erpen]: Essen 6.VI.1958 (leg. T. Hontelé, coll. R.M.H.N.B.). E. Janmouille det. 1958 as *Bactra furfurana* Hw. male.

The three latter specimens are redetermined as *Bactra lacteana* Caradja, 27.II.1993 by K. Larsen. They are all without abdomen, and the slides were not available.

Bactra lacteana (fig. 4) adults mostly resemble *Bactra lancealana*, but in the genitalia it is very much alike *furfurana*. Like in *suedana* there are small dark streaks near the apex in the forewing, but they are not so dominant, as they are in *suedana*, and very often there are two or more thin streaks. The differences in the genitalia to *furfurana* are slight but constant. Adults and genitalia of both sexes are figured correctly by Bengtsson (1990) and by Larsen & Vilhelmsen (1988).

The locality for *lacteana* consists of moist swamps with *Carex*, but in dryer places than *suedana* inhabits. It is also found in moist depressions behind dunes (Palm 1982: 55). The moths fly in late afternoon, and later come to



Fig. 4: *Bactra lacteana* Caradja, 1916, male. Belgium, coll. R.M.H.N.B.

light. The flight period extends from June to the end of July, whereas *furfurana* continues to fly until the end of August.

Bactra lacteana is known from the Far East, southern Siberia, Kazakhstan, Mongolia, China and Japan. In Europe it is known from Finland, Norway, Sweden, Denmark, Germany, Poland and Slovakia (Gustafsson 1987, Hannemann 1961, Kuznetsov 1989, Patocka, Reiprich & Pastóralis 1989 and Razowski 1983). I have not seen the species correctly stated from other European countries.

Only *furfurana* has hitherto been mentioned from Belgium (de Picquendaale 1906: 125 and De Prins 1983: 19), but as all specimens under that name in the collections belong to *lacteana*, the other species (*furfurana*) should be deleted from the list until correctly determined specimens are found.

Epermenia petrusella (Heylaerts, 1883)

Material examined: Belgium, Prov. of Luxembourg, Heinstert, 1 specimen, 11.IX.1989 (leg. M. Meyer, coll. K. Larsen). Gen. slide 2978 K. Larsen, *E. petrusella* (Heyl.) male. In the museum collection of Grand Duché de Luxembourg there are four specimens more from the same date and locality.

The species has black longitudinal streaks on the forewing (fig. 5), which separates it from *E. illigerella* (Hübner, [1813]). Male and female genitalia are shown in Gaedike (1966). The larva lives in a loose web in the leaves of *Peucedanum montanum* (L.). The flight period is mentioned as May to July (Gaedike 1966: 464). As the five specimens from Belgium are found in September, the species must be either double brooded or be hibernating in the adult stage.

The distribution is central to south European, but local and rare in very few localities. It is mentioned from Hungary (Osca Nagyerdő), Rumania (Ineu: Borosjenő), Croatia (Fiume, Fuzine, Rijeka), Austria (Mödling, Klosterneuburg, Kritzendorf, Gumpoldskirchen) and France (Digne) (Gaedike 1966: 464 & 667; 1975: 222).

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Fig. 5: *Epermenia petrusella* (Heylaerts, 1883), male. Belgium, Prov. of Luxembourg, Heinstert, 11.IX.1989 (leg. M. Meyer, coll. K. Larsen).

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